REMARKS

Claims 1-27 are currently pending in the subject application and are presently under consideration. A version of the claims can be found at pages 2-6 of this Reply for ease of reference by the Examiner.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein. It is respectfully submitted that this rejection should be withdrawn for at least the following reasons.

I. Rejection of Claims 1-15 and 17-26 Under 35 U.S.C. §102(e)

Claims 1-15 and 17-26 stand rejected under 35 U.S.C. §102(e) as being anticipated by Le *et al.* (U.S. 6,690,602 B1). It is respectfully requested that this rejection be withdrawn for at least the following reason. Le *et al.* does not teach or suggest each and every limitation recited in the subject claims.

> A claim is anticipated only if ***each and every element*** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ...claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Specifically, independent claim 1 recites "a first bit value of a first reference cell of the first reference array averaged with a second bit value of a second reference cell of the second reference array to arrive at the reference voltage employed ***during a data cell read operation.***" Similarly, independent claims 13, 17, and 24 relate to the data cell read operation. During a data cell read operation, the first reference cell voltage and the second reference cell voltage can be averaged in order to determine whether a data bit is programmed or unprogrammed. (*See* Application, pg. 12, lines 9-10; and pg. 12, lines 23-24). Moreover, this determination is utilized during ***a data cell read operation***. (*See* Application, pg. 12, lines 3-7; and pg. 12, lines 18-21). Le *et al.* merely utilizes an averaging of voltage levels for programming within the memory cells. Yet, Le *et al.* does not teach or suggest utilizing such average voltage to be utilized during ***a data cell read operation*** as recited in the subject claims. Rather, Fig. 4 of Le *et al.* is a

comparison circuit that can be utilized to compare the value ***read from a core cell*** to the averaged data read from the reference array. A read from a core cell is not a data cell read operation because the core contains a plurality of cells with respective values associated therewith. For example, a read of the data cell relates to the voltage level associated to the particular cell, whereas the read of a core pertains to the cumulative bitlines and wordlines within the core. Hence, while the cited reference is directed towards a *method* of *programming cells* in reference arrays (*See* Le *et al.*, col. 6, lines 17-19), it is silent towards arriving at a reference voltage ***utilized during a read operation*** as in the claimed invention.

In addition, the Examiner is reminded that the standard by which anticipation is to be measured is ***strict identity*** between the cited document and the invention as claimed, not mere equivalence or similarity. *See, Richardson* at 9 USPQ2d 1913, 1920. This means that in order to establish anticipation under 35 U.S.C. §102, the single document cited must not only expressly or inherently describe each and every limitation set forth in the patent claim, but also the identical invention must be shown in as complete detail as is contained in the claim. The fact that Le *et al.* fails to provide utilizing a reference voltage during a data cell read operation leads one to believe that the cited document in the final analysis does not provide an invention identical to that recited in the subject claims.

In view of at least the foregoing comments, it is readily apparent that Le *et al.* does not teach or suggest each and every limitation of the independent claims 1, 13, 17, 24 (and claims 2-12, 14-16, 18-23, and 25-27 which respectively depend there from). Applicants' representative respectfully requests the withdrawal of this rejection.

II. Rejection of Claims 13, 16, 24 and 27 Under 35 U.S.C. §102(e)

Claims 13, 16, 24 and 27 stand rejected under 35 U.S.C. §102(e) as being anticipated by Kurihara *et al.* (U.S. 6,791,880 B1). It is respectfully requested that this rejection be withdrawn for at least the following reason. Kurihara *et al.* does not teach or suggest each and every limitation recited in the subject claims.

In particular, independent claims 13 and 24 implement an average of ***a first bit value of a first reference cell and a second bit value of a second reference cell*** to arrive at a reference voltage for a read operation. Kurihara *et al.* does not teach or suggest an average of a first bit value of a first reference cell and a second bit value of a second reference cell, but rather

simulates beginning of life (BOL) behavior of memory cell. Specifically, Kurihara *et al.* utilizes an adjustable current source (460) with a selected column of a memory cell (455) and a disparate adjustable current source (485) for a disparate memory cell (480) as inputs to cascode 445 and cascode 470 respectively. (*See* Fig. 4). The adjustable current source provides end of life (EOL) simulation for the reference current source, so that the beginning of life (BOL) behavior of the sense amplifier and its inputs can be evaluated. (*See* col. 4, lines 55-60). The ***cascode 445 and cascode 470 can provide a combined output that is an average of their inputs*** when switches 440 and 465 are closed. (*See* col. 5, lines 20-24, emphasis added). The input to cascode 445 is the current associated with the column (*e.g.*, wordline determined by the Y decoder 450) in the memory cell 455 and the current from the adjustable current source 460. Similarly, the input to cascode 470 is the current associated with the column (determined by the Y decoder 475) in the memory cell 480 and the current from the adjustable current source 485. (*See* Fig. 4). Thus, with the input to the cascode 445 and 470 being a current and an adjustable current source, the average provided contains the current from two memory cells plus the the current from two adjustable sources.

In view of at least the foregoing, it is readily apparent that Karihara *et al.* does not teach or suggest each and every limitation of independent claims 13 and 24 (and claims 16 and 27 which respectively depend there from). Applicants' representative respectfully requests the rejection be withdrawn.

CONCLUSION

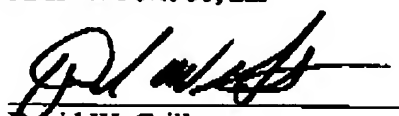
The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [AMDP975US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN & TUROCY, LLP



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